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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,035	02/09/2000	Shulong Li	2082B	3328

25280 7590 09/12/2002

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EXAMINER

SINGH, ARTI R

ART UNIT PAPER NUMBER

1771

DATE MAILED: 09/12/2002

5

OA due 12/12/02

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,035

Applicant(s)

LI, SHULONG

Examiner

Ms. Arti R. Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-10, 12 & 16-18 is/are rejected.
- 7) ☐ Claim(s) 5-7, 11, 13-15 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: At the beginning of the Specification (page 1) under the heading "Cross Reference To Related Applications", the continuity data needs to be updated as Application 09/335,257 has matured into USP 6,117,365. Appropriate correction is required.

Claim Objections

2. Claim 19 is objected to because of the following informalities: it appears that the phrase "an elastomer possessing" has been typed twice. Please delete the redundant phrase. Appropriate correction is required. This claim is being interpreted as "the airbag of claim 13, wherein said coating comprises an elastomer possessing a tensile strength of at least 1,500 psi". Additionally, the "p" in "Psi" should not be capitalized.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Regarding claims 1-19, the phrase "side impact curtain-**type**" renders the claims indefinite because the claims include elements not actually disclosed (those encompassed by "type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). Applicant may just refer to airbag as a side impact airbag, which is common U.S. terminology.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection

Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 9 & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by VEIGA et al (USPN 6,239,046).

7. Applicant's claim 1 is drawn to a side impact airbag to which a two-layered coating system is applied, wherein at least one of the said layers comprises polyurethane. Claim 9 further limits claim 1 to where at least one layer of the polyurethane coating is applied to said airbag in an add-on weight of from about 0.3 to 2.5 ounces/square on each side of the cushion. Claim 10 further limits claim one wherein at least one layer of coating comprising polyurethane is applied to said airbag in an add-on weight of from about 0.6 to about 1.5 ounces/square yard.

8. Veiga et al. teach a coated textile fabric for use in an airbag (air curtain-column .1, line 28 & column 2, line 34, which is also synonymous in the art as a side curtain, as it is positioned laterally to the occupant) having a plurality of polymeric layers coated thereto (column 1, lines 5-10). The fabric, being a woven, knit or nonwoven textile is first coated with a polyurethane layer, which is then coated with a layer of elastomeric polysiloxane (column 1, lines 50-55). The polyurethane coating weight applied is about 0.3-ounces/square yard to about 1.5-ounces/square yard with 0.5-ounces/square yard preferred (column 1, lines 57-59). In an alternative

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embodiment as shown in column 3, lines 39-50, the fabric may be coated on both sides with a polyurethane coating which is similar in its composition and physical properties to the first polyurethane layer. With regard to Applicant's claim 9, the required coating of both the polyurethane layers at the most would add up to 1.5 ounces per sq. yd + 0.5 oz. per sq. yd = 2.0 oz. per sq. yd (Patent Claims 22 & 23). Thus, Veiga et al. teach a side impact air bag having at least one layer of a polyurethane coating wherein the coating has an add-on weight of at least 0.3 to a bout 2.5 ounces/ square yard. The composite may be laminated on both sides with polyurethane coatings. Therefore, the cited Veiga et al patent anticipates Applicant's Claims 1, 9 & 10.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-4, 8, & 12; 16-18 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over VEIGA et al (USPN 6,239,046). Veiga et al. disclose what is set forth above, however Veiga et al. fail to disclose or do not explicitly teach the claimed airbag having *"a peak initial pressure of 30 psi through utilization of 6.7 liter compresses nitrogen gas tank, a pressure retention of at least 1 or 6 psi at 10 seconds subsequent to inflation and tensile strength*, it is reasonable to presume that the said featured property is inherent to Veiga et al. Support for said presumption is found in the use of like materials i.e. a side airbag coated with polyurethane coating system having an add-on weight of at most 3.0 oz/yd², which would result in having this property. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 495. Alternatively, the

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presently claimed property of an airbag having a peak initial pressure of 30 psi through utilization of 6.7 liter compresses nitrogen gas tank, having a pressure retention of at least 1 or 6 psi at 10 seconds subsequent to inflation would obviously have been present, along with the tensile strength, once the Veiga product was provided. *See In re Best, 195 USPQ 433.*

Allowable Subject Matter

11. Claims 5-7, 11, 13-15 & 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Prior to Applicant's effective filing date (06/17/99), there was no prior art found that teaches or fairly suggests the use of a jacquard wovens as a fabric layer in airbags. At the time the invention was conceived the most commonly known weaving configurations were plain, basket or twill. Although, Veiga et al. disclose that any weaving configuration can be employed (column 2, line 28) there is no motivation to use a decorative fabric, such as a jacquard woven, which is more expensive to produce than the plain, basket or twill fabric

12. With respect to Claims 13-15, though Veiga et al. appears to be the closest prior art at this time, Veiga requires a polysiloxane layer atop at least one of the polyurethane layers and thus the laminate would not be silicone -free.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- USPN 6,169,043 to Li & 6,177,365 both disclose the use of jacquard wovens as an airbag fabric, but fails to meet Applicant's effective filing date and thus are not available as references.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti R. Singh whose telephone number is 703-305-0291. The examiner can normally be reached on M-F 7:00am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-873-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Ms. Arti R. Singh
Patent Examiner
Art Unit 1771

ars
September 9, 2002